TOSHIBA/HOUSTON INVERTER PLANT
DESIGN DATA D-UM0029 Page 1 of 4
SUBJECT: 1000 Series UPS Options – Frequency Conversion

Models: 1000 Series UPS

CAUTIONS
&
INSTALLATION INSTRUCTIONS

Cautions:

Any maintenance, additions, and/or changes that are to be done to this UPS should be performed by a certified Toshiba trained repair technician authorized to service Toshiba's 1000 Series UPS.

The followings are a list of minimum safety requirements that should be adhered to, and is not to be interpreted to be the only safety requirements to follow. Please follow all Local, State, and Federal Safety Requirements.

1) Verify that the UPS is off and that the power cord or main power is disconnected from the power source. (Observe Lock-out/Tag-out procedures if applicable)
2) Remove watches, rings, and/or other metal objects.
3) Use insulated tools to prevent inadvertent shorts.
4) Wear safety glasses, rubber gloves and boots.
5) Do not lay tools or metal parts on top of the batteries.
6) All connections must be made in accordance with National and Local Electric Codes.

In no event will Toshiba Corporation be responsible or liable for either indirect or consequential damage or injury that may result from the modification of this unit.

Installation Instructions:

RELATED DATA FILE NO.

				COPY	DRAWN BY:	DATE:
				TO:	H. Huynh	10/2005
				TO:	CHECKED BY:	
				TO:	MTA	10/2005
				TO:	APPROVED BY:	DATE:
NO.	REVISION	DATE	BY	TO:		

Install "FlashH08" Flash Program

There are two types of installation files for the Flash program. The one that is appropriate for you can be determined by first checking the "CPU Version" that is displayed on the LCD display in the front panel.

1.) If the format is XX.X

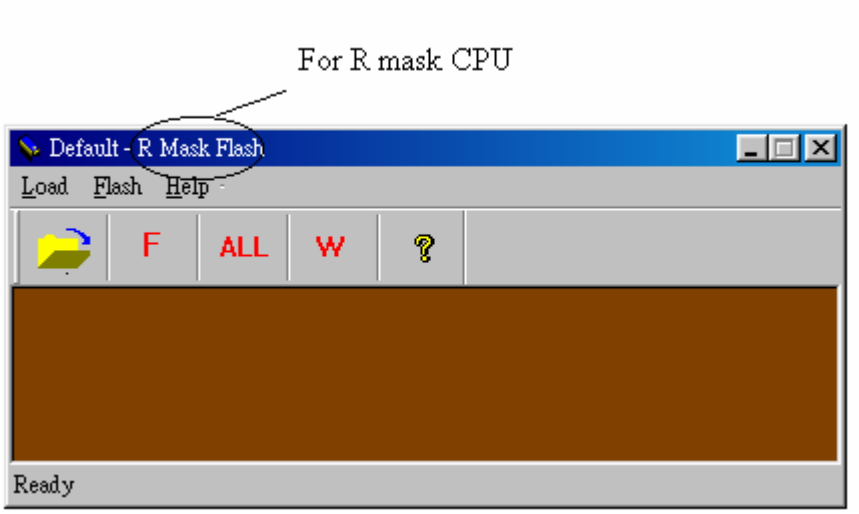
This means that the CPU is an **R mask** type. In this case you should run the **"Flash3062_R"** program to install the "FlashH08" flash software. Further instructions on configuration are explained below.

2) If the format is XX.X**B**

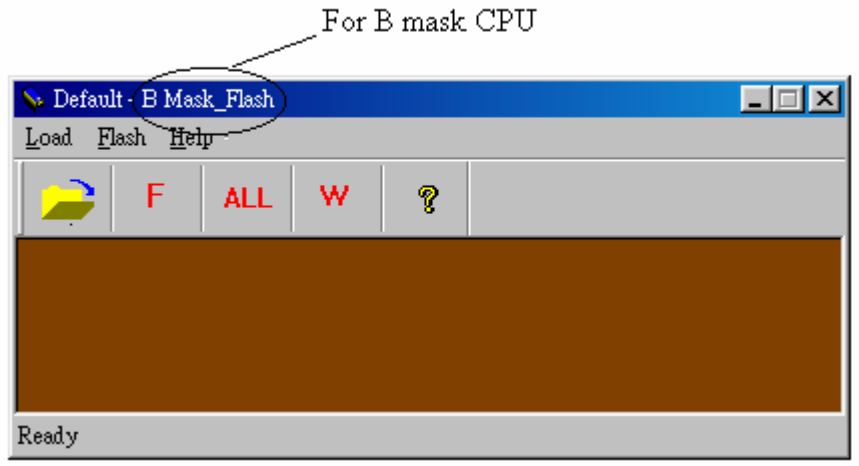
This means that the CPU is a **B mask** type. In this case you should run the **"Flash3062_B"** program to install the "FlashH08" flash software. Further instructions on configuration are explained below.

Use "FlashH08 " to flash R mask type/B mask type CPU

1. To properly configure and utilize this software, terminate all applications that occupy COM 1. (COM 1 is the default communication port for this software)
2. Connect the RS232 cable to the UPS from "COM1" of the PC.
3. Turn off the UPS, but keep the AC Line on. The proper procedure for this is explained in the UPS manual that is included with the UPS.
4. Click on the appropriate "FlashH08" software that was installed in the previous section.
   i. If you installed the **R mask** type, it should be labeled "**R Mask Flash**" in the title like the one shown below.



ii. If you installed the **B mask** type, it should be labeled "**B Mask Flash**" in the title like the one shown below.



5. Click **Load** in the Menu bar to load the file (*.mot) that you want to reflash to the CPU.
6. Click the **ALL** button in the Toolbar and it will display "**Programming**."[1,2] During this period, both the LEDs labeled "Bypass_LED" and "On_LED" are turned on for the tower UPS. For the Rackmount 1U, both the LEDs labeled "Inverter" and "DC LOW" are lit.

Setup:

1. Make sure the UPS is off and the AC Line is on. The LCD screen should appear blank.
2. Press and hold the **function** button for 1 second and release the button to enter the front panel settings. Once in this mode, you can scroll through different settings using the **function** button.
3. Look for the newly added software, "**Freq Convert Set**" and press **Enter.**
4. Once inside, you can change the output frequency by pressing the **function** button.
5. After choosing the correct frequency, press **Enter** to select it. Once selected, the LCD will display a blank screen.
6. Turn on the UPS.

Note:

[1] If the communication fails during "**Programming**" for:

- R Mask – user should wait more than 35 seconds and then click the **"W"** button on the Toolbar to start "**Programming**" again.
- B Mask – The LED labeled **Alarmed_LED** will be turned on. The user should wait more than 10 seconds and then click the **"W"** button on the Toolbar to start "**Programming**" again.

[2] Do not run any other application software on the PC during "**Flash Process**", because the "FlashH08" application uses up a large amount of the PCs resources.